

The Innovative Application and Effects of Virtual Reality Technology in the Marxist views of Journalism Course

Baoping Liu

liubaopinghust@163.com

School of Marxism, Huazhong University of Science and Technology, Wuhan 430074, China

Abstract. Grounded on an analytic appraisal of the concept and distinctive properties of virtual reality technology, and combined with the essential characteristics of courses on The Marxist views of Journalism course, this study constructs an immersive teaching model utilizing virtual reality technology that encompasses instructional objectives, scenarios, activities, and assessments. The efficacy of this educational paradigm was gauged through questionnaire-based evaluations, revealing that the anticipated positive outcomes were indeed achieved. This investigation proffers viable suggestions and references for addressing the pragmatic challenges encountered in the pedagogy of The Marxist views of Journalism course, thereby facilitating the cultivation of preeminent talents in journalism and communication.

Keywords: The Marxist views of Journalism course; Immersive Teaching; Teaching Effectiveness

1 Introduction

In an era of rapid scientific and technological advancement, with significant leaps in computer and hardware capabilities, virtual reality (VR) technology has emerged triumphantly. This nascent modality synthesizes sensor technology, tridimensional imaging, and interactive mechanisms, engendering a perceptible and experiential, immersive virtual environment that transcends the traditional, fostering a subjective, immersive experience within its users. Hence, virtual reality technology has demonstrated immense advantages and potential within the educational domain.

The Marxist views of Journalism course constitutes a core course within the university journalism curriculum, shaping the fundamental issues regarding the educational philosophy of molding minds. As societal evolution and transformations in communication forms persist, higher educational institutions have escalated their pedagogical standards for courses on The Marxist views of Journalism course. However, contemporary college-level instruction in this discipline encounters several obstacles, such as waning student interest and limited comprehension of the material [1]. Consequently, an urgent integration of virtual reality technology with The Marxist views of Journalism course instruction is warranted, harnessing the technology's strengths to augment teaching efficacy.

In recent years, the expansive application of virtual reality technology in the educational realm has been widely noted. Academics have probed the congruence between VR technology and future educational reforms, the challenges of empowering education through VR, and practical strategies thereof[2,3]. However, applications of VR technology within the domain of media education, particularly in theoretical instruction and simulation-based experimentation, remain relatively uncharted. Some scholars have undertaken studies on embedding ideological and political education in media-related courses through VR technology[4], and others have delved into the application of VR in teaching internet and new media specialties[5]. Yet, investigations into the use of VR technology within the Marxist Journalism Perspective curriculum have been lacking. Consequently, this paper builds on the foundation of virtual reality technology to propose application strategies for VR within the Marxist views of Journalism course—pertaining to teaching scenarios, educational activities, and evaluation methodologies—and evaluates the real-world effectiveness of VR's deployment in this context.

2 Virtual reality technology and its characteristics

The apex of technological convergence, virtual reality (VR) technology stands as a multidisciplinary domain that amalgamates advanced computer graphics, multimedia processing, precision sensor technology, intuitive human-computer interaction, high-speed networking, stereoscopic display methodologies, and simulation theories [6]. By virtue of this integration, VR has the power to concoct immersive environments that engage user senses beyond mere visibility[7], inviting them to interact on a tangible level. This profound intersectionality of immersion and interaction exerts a transformative influence on the user's reality.

Since its inception, virtual reality technology was envisaged as a simulated environment orchestrated by computers, allowing users to visualize and manipulate abstract data within a tri-dimensional space. Early research initiatives, beginning in the 1980s, predominantly spotlighted visual simulation—users could be virtually teleported into a computer-concocted realm via the symbiosis of head-mounted displays (HMDs) and computer graphics[8]. Initially fixated on visual verisimilitude, such as real-time rendering and panoramic playback, technological progress, especially in graphics and sensor capabilities, has propelled VR beyond mere visual replication, now providing thorough sensory immersion including auditory, tactile, and potentially even olfactory and gustatory experiences.

In essence, virtual reality technology enables users, through computer-generated simulations, to explore, interact, and immerse themselves in a digital, three-dimensional environment, experiencing a sense of presence that mirrors physical reality.

At present, virtual reality technology is defined by the "3I" attributes: Immersion, Interaction, and Imagination[9].

Immersion refers to the sensation elicited by the virtual environment, engendering a feeling of being part of it, secluded from the real world. This immersive experience stems from the integration of comprehensive sensory interactions such as vision, hearing, and touch. For instance, a head-mounted display (HMD) can envelop the user's field of view, presenting high-resolution, high-refresh-rate stereoscopic imagery that, when combined with 3D auditory effects,

facilitates the user's disregard for external distractions, leading to full engagement with the virtual environment. Moreover, modern VR equipment aims to enhance immersion by simulating additional sensory experiences, replicating the sense of touch with vibration and pressure and attempting to reflect tastes and smells.

Interaction delves into how users maneuver objects and communicate within the virtual milieu. Enhanced interactive capabilities bolster immersion and render virtual experiences more tangible and enthralling. VR interaction chiefly employs specially designed input devices, like motion controllers and data gloves, which detect user gestures, movement, and posture, translating them into corresponding actions in the virtual space. Eye-tracking technology is also utilized to acknowledge the user's gaze direction as an interactive modality. These bi-directional experiences allow users to directly influence the virtual environment, accentuating immersion and proffering a more natural and intuitive mode of interaction.

Imagination, a singularly alluring trait of virtual reality technology, pertains to the freedom users have to unleash their creative and imaginative faculties within the virtual domain. In the real world, the constraints of physics, resource scarcity, and technical challenges can often impede innovation and creativity. Virtual reality, unfettered by such limitations, provides a virtually boundless expanse where one can experiment, design, and undergo self-conceived scenarios and encounters; architects can evaluate and optimize their designs within the virtual space, artists can fabricate artworks unachievable in the real world, and game developers can craft enchanting and immersive fantasy realms. This imaginative capacity is one of VR's profound potentials, garnering attention from research, business, and educational spheres alike.

In conclusion, the trio of immersive, interactive, and imaginative characteristics collectively define the depth and quality of the VR experience. These elements complement each other and drive virtual reality towards higher echelons of evolution. With continuing technological advancements, these traits will render the virtual experience increasingly lifelike, interactive, and unprecedented in human engagement.

3 Constructing an immersive teaching model based on virtual reality technology for the marxist views of journalism course

This paper articulates the construction of an immersive teaching model for the Marxist views of Journalism course, grounded in virtual reality technology, delineated across four dimensions: instructional objectives, teaching scenes, teaching activities, and teaching evaluation, as depicted in Figure 1.

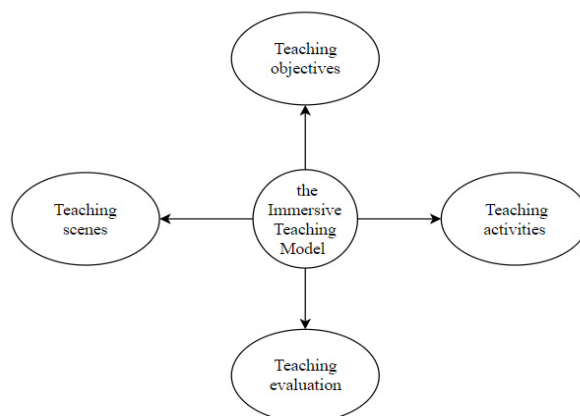


Fig1. the immersion teaching model of the Marxist views of journalism course based on virtual reality technology

3.1 Fostering well-rounded journalistic talent through holistic teaching objectives

The formulation of educational aims is paramount in the architecting of an immersive teaching paradigm. These objectives are designed to captivate learners within the educational activities, catalyzing their zest for learning and the impetus to explore new knowledge, thereby harmonizing the development of intellect and well-being. For courses in Marxist journalism, the immersive educational goals can be granulated into three target systems: knowledge impartation, skill enhancement, and value shaping. In terms of knowledge-oriented goals, students, absorbed in immersive learning experiences, should become versed in the evolution of Marxist journalism, grasping its essence, function, principles, methodology, and inherent patterns, while deeply comprehending its vital directive significance to the advancement of China's journalistic endeavors. Regarding skill teaching objectives, students will learn to utilize the Marxist views of Journalism to scrutinize and analyze news events and an array of journalistic phenomena, bolstering their proficiency in distinguishing various news trends and theories, and employ Marxist views conscientiously in journalistic pursuits such as reportage, editing, critique, and photography, thereby elevating their capabilities in media dissemination and opinion guidance. The last facet, value shaping, entails guiding students, via immersive teaching of Marxist journalistic perspectives, to steadfastly adhere to the correct political orientation, tonality in public opinion, journalistic motivations, and work attitudes, fostering a resolute dedication to socialist journalistic work and striving to mold them into exemplary journalists, trusted by the Party and the populace and endowed with robust ethical standards and comprehensive media skills.

3.2 Designing tangible and interactive teaching scenes under the Marxist views of Journalism

Virtual reality technology can mobilize multisensory student participation by crafting direct, interactive learning scenarios that allow for full cognitive and emotional engagement to deepen and widen their learning experience. In the Marxist views of Journalism course, the design of educational scenes should judiciously leverage virtual reality technology to relate key content

with students' real-life experiences, thereby creating vivid and concrete pedagogical situations that enable students to better comprehend and apply the Marxist views of Journalism principles. For instance, when elucidating Marx and Engels' journalistic works and the genesis of The Marxist views of Journalism course, one might construct a virtual milieu replicating the processes of founding, editing, and distributing the *Neue Rheinische Zeitung*. Students might assume various roles within the scenario according to their preferences, such as comrades, correspondents, or readers of Marx and Engels, thus facilitating an immersive experience where students actively partake in newspaper establishment and operation. In these virtual contexts, students will grasp the endeavors of Marx and Engels in establishing the newspaper's core purposes, assembling editorial and distribution teams, orchestrating a network of correspondents across Europe, garnering advertisements, and managing the newspaper's finances. Furthermore, by utilizing virtual reality, students may also engage in dialogue with virtual representations of Marx and Engels, posing questions and receiving their responses, an interactive experience that enhances their sense of participation and critical thinking skills. Ultimately, more tangible, vivid, and interactive teaching situations stimulate students' learning interest and aid them in understanding and applying proletarian party press concepts formulated by Marx and Engels, nurturing their analytical capabilities and creativity.

3.3 Pursuing diverse and practical teaching activities

Virtual reality technology prioritizes hands-on student experience within the classroom, thus, the design and execution of teaching activities center on practical experience as a key element. Within the scope of the Marxist views of Journalism, educators should fashion instructional activities that merge theory and practice, such as field visits, experimental inquiries, collaborative teamwork, and role-playing exercises. By establishing virtual learning environments, instructors can steer students towards practical tasks, experimental research, and project formulation, allowing application of the Marxist views of Journalism principles in actual contexts. These practice-driven activities permit students to better comprehend and master the Marxist views of Journalism and hone skills in problem-solving, cooperation, and communication. Moreover, virtual reality also empowers students to engage in learning via role-play and gamified education models. Embarking on different roles or participating in educational games, students can vicariously experience problem resolution processes, engage in lively discussions, and collaborate, thus receiving a more tangible, authentic learning encounter. Implementing diverse and practical teaching activities not only sparks a student's intrinsic motivation for learning but also offers a more concrete and realistic educational experience, facilitating a deeper mastery of knowledge and competencies.

3.4 Establishing procedural, precise, and multi-faceted teaching evaluations

The incorporation of virtual reality enables a more procedural, precise, and diverse array of teaching evaluations. In crafting evaluative measures for the Marxist views of Journalism courses, emerging technologies such as big data analytics and learning analysis can be enlisted to capture, collect, and scrutinize dynamic information within instructional settings, achieving procedural, precise, and multifaceted evaluations. Primarily, evaluation proceduralism manifests through the application of intelligent technologies to monitor and manage students' learning journeys. Under the influence of intelligent systems, the Marxist views of Journalism course pedagogy can perform data tracking and management for both tutoring and student

learning processes—for instance, documenting and analyzing students’ online assignments, responses, and interactive discussions, thereby creating data profiles of learning behavior. Such procedural assessments evaluate not only knowledge acquisition but also chronicle diverse aspects of the learning trajectory, thus supplying more nuanced insights and analytical foundations for instruction. Additionally, the precision of evaluations reflects the meticulous analysis of student behavior and tailored feedback. Intelligent technologies can capture and record student verbal cues and bodily gestures, enabling multimodal data analysis and precise assessments. Such findings enable educators to offer customized feedback and guidance, assisting students in identifying and amending individual learning challenges and realizing personalized and precise educational direction. Moreover, evaluation diversity is represented by a plurality in both methods and indicators. Prior to assessment, instructors might craft personalized evaluation plans considering student personality traits and learning styles. During the evaluation, the Marxist views of Journalism course can rely on technologies such as computer vision, speech recognition, cognitive computing, and intelligent algorithms to comprehensively document student behaviors throughout the learning process. Following the evaluation, instructional refinements specific to the Marxist views of Journalism might be based on student feedback, further aligning teaching with their learning necessities. This diversity of assessment approaches and criteria ensures a more encompassing evaluation of students’ academic standing and skills development, providing educators with more accurate evaluative benchmarks.

4 The efficacy of virtual reality technology in the teaching of the marxist views of journalism instruction

The implementation of the immersive teaching model of the Marxist views of journalism course based on virtual reality technology has demonstrated significant effectiveness, as observed through surveys distributed among 106 journalism students, examining their practical instructional experiences. Analysis of the survey feedback reveals considerable success of the instructional method, with 31% of students reporting complete satisfaction and 56% expressing considerable contentment, while 13% considered the instruction to be average, and no students indicating dissatisfaction (as shown in Table 1).

Table 1. Survey Results on Overall Satisfaction with the immersive teaching model of the Marxist views of journalism course based on virtual reality technology

Option	Number of Respondents	Proportion
Completely Satisfied	33	31%
Considerably Satisfied	59	56%
Average	14	13%
Somewhat Dissatisfied	0	0
Completely Dissatisfied	0	0

In exploring the teaching model's impact on students, it was found that the approach invigorates students’ initiative in learning the Marxist views of journalism and promotes a profound grasp of the subject with an enhancement in practical application skills.

Regarding learning initiative, 92% of students believe that the model has sparked their enthusiasm and proactivity (as reflected in Table 2). When elaborating on their reasons in the

survey, many students attribute their increased involvement to the realistic news settings afforded by virtual reality technology, immersing them in practical activities such as reporting and interviewing, thus intensifying their intellectual engagement and enabling them to derive pleasure from learning while also encouraging autonomous exploration. Additionally, within this immersive pedagogical setting, students eagerly participate in classroom debates, group endeavors, and role-playing activities. Their perspectives and values are both respected and encouraged, fostering their desire to share, express, and contemplate.

Table 2. Survey Results on the Impact of the immersive teaching model of the Marxist views of journalism course based on virtual reality technology on Students (Multiple Choice)

Option	Number of Respondents	Proportion
Stimulated Learning Initiative	98	92%
Improved Learning Efficiency	94	89%
Enhanced Practical Application Skills	88	83%
Unclear	1	0.94%

As for learning efficiency, 89% of students believe that the instructional model has elevated their learning productivity (as shown in Table 2). In delving into the survey reasons for the improvement in learning efficiency, students credit the method's ability to concretize and visualize the abstract and profound Marxist journalism theories, augmenting their understanding and application. Moreover, their immersion in these teaching environments fosters concentration and focus, significantly raising their absorption of new knowledge, conceptual understanding, and practical application.

In terms of practical application skills of the Marxist views of journalism, 85% of students feel the pedagogical method has improved their abilities (indicated by Table 2). When students elaborate on how the pedagogy enhanced their practical skills, they refer to the simulated journalistic tasks and role-playing activities available within virtual or simulated environments, which provide them with hands-on experience. Additionally, simulations and case analyses allow them to learn how to aptly navigate complex ethical dilemmas and professional standards in a virtual context, sharpening their practical skills.

5 Conclusion

Virtual reality is revolutionizing the landscape of education by immersing students in interactive 3D environments. Notably, within the realm of the Marxist views of journalism course, virtual reality introduces novel perspectives, allowing students to experience and scrutinize a myriad of journalistic phenomena firsthand.

Virtual reality transcends mere knowledge transfer, fostering practical abilities in pupils. Engaged in simulated real-world scenarios, students hone their analytical and problem-solving skills. The intelligence, context specificity, variety, and immersive nature of virtual reality significantly enhance the interactivity and allure of these courses, invigorating pupils' curiosity and creativity.

Despite its transformative potential, virtual reality's implementation in educational spheres encounters technical constraints and operational complexity. The limitations of hardware and

software, a lack of genuine tactility, and onerous interfaces currently impede the efficacy of virtual reality technology. Moreover, there is a pressing need for more precise mechanisms to gauge its pedagogic impact.

Looking ahead, advancements in virtual reality are poised to surmount these challenges. Superior audiovisual fidelity, more naturalistic interactive experiences, and intricately designed pedagogic support systems are on the horizon. The integration of artificial intelligence promises a boon to the personalization and adaptability of instructional content, in addition to enhancing assessments of student learning outcomes. Furthermore, as hardware costs diminish, virtual reality will become more accessible, thereby permeating a greater number of educational institutions.

Courses underpinned by virtual reality in the Marxist views of Journalism course highlight the importance of practical involvement and experiential learning, aiding students in their comprehension and assimilation of knowledge. With the evolution of metaverse technologies, curricular innovation beckons, introducing a wider scope of possibilities for the Marxist views of Journalism education within a virtual reality context.

In summary, virtual reality harbors immense potential in the domain of the Marxist views of Journalism education. As it dovetails more profoundly with pedagogic practices and matures technologically, virtual reality is set to play an increasingly pivotal role in education, augmenting both the substance and the methodologies of teaching and learning.

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